

REMARKS

Claims 1, 3-17, and 19-26 are now pending in the application. Claims 1, 3-17, 19-21 and 26 stand rejected. Claims 2 and 18 have been previously canceled and Claims 22-25 have been previously withdrawn from consideration. Claims 1, 3-5, 8, 9 and 13 have been amended herein. Support for the amendments can be found throughout the application, drawings and claims as originally filed and, as such, no new matter has been presented. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

CLAIM OBJECTIONS

Claim 3 stands objected to for certain informalities. Applicants have amended Claim 3 to overcome these informalities. Claims 4-5 and 8-9 stand objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicants have amended Claims 4-5 and 8-9 to overcome these objections. Therefore, reconsideration and withdrawal of these objections are respectfully requested.

REJECTION UNDER 35 U.S.C. § 112

Claims 1, 3-17, 19-21, and 26 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicants regard as the invention. Applicants have amended Claims 1 and 13 to overcome these rejections. Therefore, reconsideration and withdrawal of these rejections are respectfully requested.

REJECTION UNDER 35 U.S.C. §§ 102 AND 103

Claims 1 and 3-5 stand rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being obvious over Raevsky (U.S. Pat. No. 5,206,088). Claims 6-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Raevsky. These rejections are respectfully traversed.

Initially, Applicants note that Raevsky appears to disclose a method of increasing fire retardant properties. In one example, Raevsky teaches that applying an ablative material to a sheetrock, and coating the sheetrock with an intumescent paint increases flame retardant properties. Raevsky teaches that the ablative material, SM-F, is formed by roll milling the associated constituents to form a mixture, which is then compression molded into sheets. Thus, the ablative material of Raevsky is formed into sheets prior to being coupled to the sheetrock. Then, Raevsky discloses that the intumescent paint is applied in two coats. In another example, Raevsky teaches the use of SM-P as an ablative material, which is formed by compression molding the SM-P into a plaster. In sum, Raevsky teaches applying a coating to a formed layer of ablative material. In contrast to Raevsky, independent Claim 1 recites:

...wherein the intumescent material is **intermixed**
with only a portion of the thickness of the ablative material
(emphasis added).

Applicants respectfully assert that Raevsky does not teach, suggest or disclose an intumescent material that is **intermixed** with only a portion of the thickness of the ablative material. The Office states that through the application of the intumescent paint, the paint can become intermixed with the formed ablative sheet as the ablative sheet is porous. Applicants respectfully assert that spraying a formed, hardened sheet

with a liquid does not constitute intermixing as understood by one of ordinary skill in the art. In this regard, Applicants note that one of ordinary skill in the art would interpret the term “intermixed” to represent “to mix or become mixed together” and would interpret the term “mixed” to represent “to combine (substances, elements, things, etc.) into one mass, collection, or assemblage, generally with a thorough blending of the constituents” *Random House Unabridged Dictionary* (Random House, Inc. 2006). Thus, one of skill in the art would fairly interpret the term “intermixed” to represent various elements that are combined or blended together into one mass. Raevsky does not teach, suggest or disclose an intumescent material that is combined or blended together with only a portion of the thickness of the ablative material to form one mass or layer. Rather, Raevsky teaches coating a formed ablative sheet with an intumescent paint. Spraying a liquid intumescent paint onto a hardened, formed ablative sheet does not constitute intermixing as claimed.

Accordingly, for at least these reasons, Applicants respectfully assert that Raevsky does not teach, suggest or disclose each and every element of Applicants’ Claim 1, and as such, Applicants respectfully request the reconsideration and withdrawal of the rejection of Claim 1 under 35 U.S.C. §§ 102(b) and 103(a).

With regard to Claims 3-12, Applicants note these claims depend directly or indirectly from independent Claim 1, and thus, should be in condition for allowance for the reasons set forth for Claim 1 above. In addition, Applicants respectfully assert that Claim 3 includes independently allowable subject matter as Raevsky does not teach, suggest or disclose that different quantities of the intumescent material are intermixed with the ablative material at different depths within the ablative material. Applicants

respectfully assert that Claim 4 includes independently allowable subject matter as Raevsky does not teach, suggest or disclose that the intumescent material is intermixed in different quantities, and operable to be applied in successive layers to the surface, so that the ablative composition is operable to be formed by a series of layers with the layers each having a different concentration of the intumescent material mixed therein. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 3-12 under 35 U.S.C. §§ 102(b) and 103(a).

Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Raevsky in view of Deogan et al. (U.S. Pat. No. 5,900,281; hereinafter "Deogan"). Claim 19 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Raevsky in view of Tzur, further in view of Deogan et al. These rejections are respectfully traversed.

With regard to Claims 10 and 19, Applicants note these claims depend directly or indirectly from independent Claim 1 or 13, and thus, should be in condition for allowance for the reasons set forth for Claims 1 and 13 above. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 10 and 19 under 35 U.S.C. § 103(a).

Claims 11-17, 19-21, and 26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Raevsky in view of Tzur (U.S. Pat. No. 4,632,865; hereinafter "Tzur"). This rejection is respectfully traversed.

Applicants respectfully refer the Office to the remarks regarding Claims 1 and 3-12 for a discussion of the Raevsky reference. With regard to Tzur, Tzur appears to disclose a multi layer fire retardant composition, which includes a hardener mixed completely to form the layers. In contrast to Raevsky and Tzur, singly or in combination, independent Claim 13 recites:

...an intumescent material **intermixed** with a second quantity of said ablative material and operable to be applied as a second ablative layer on said first ablative layer; and wherein said first and second ablative layers cooperatively form said ablative composition (emphasis added).

As discussed with regard to Claim 1, Applicants respectfully assert that Raevsky does not teach, suggest or disclose an intumescent material **intermixed** with a second quantity of the ablative material and operable to be applied as a second ablative layer on the first ablative layer. As noted by the Office, Tzur also does not teach, suggest or disclose an intumescent material **intermixed** with a second quantity of the ablative material and operable to be applied as a second ablative layer on the first ablative layer.

Accordingly, for at least these reasons, Applicants respectfully assert that Raevsky and Tzur, singly or in combination, do not teach, suggest or disclose each and every element of Claim 13, and as such, Applicants respectfully request the reconsideration and withdrawal of the rejection of Claim 13 under 35 U.S.C. § 103(a).


With regard to Claims 11, 12, 14-17, 19-21, and 26, Applicants note these claims depend directly or indirectly from independent Claim 1 or 13, and thus, should be in condition for allowance for the reasons set forth for Claims 1 and 13 above.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections of Claims 11, 12, 14-17, 19-21, and 26 under 35 U.S.C. § 103(a).

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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